Connie Lausten
V.P. Regulatory and Legislative Affairs
4308 Brandywine St. NW
Washington, DC 20016

Comments of New Generation Biofuels

Massachusetts Department of Energy Resources

February 9, 2009

New Generation Biofuels appreciates the opportunity afforded by the Massachusetts Department of Energy Resources ("DOER") to comment on the Massachusetts Renewable Energy Portfolio Standard ("RPS") regulations based upon the statutory changes enacted in Section 105 of Chapter 169 of the Acts of 2008 (the Green Communities Act of 2008). New Generation Biofuels' comments relate to the eligibility criteria applied to liquid biofuels and the continued efforts pertaining to emissions standards and carbon life cycle analysis found 225 CMR 14.00 and 225 CMR 15.00.

I. DESCRIPTION OF NEW GENERATION BIOFUELS

Formed in 2006, New Generation Biofuels (NGB) has developed a new technology for the manufacture of a biofuel from renewable plant oils and animal fats. NGB's manufacturing process produces biofuels with substantially lower life-cycle CO_2 emissions than standard biofuels and our fuel is biodegradable.

As DOER may be aware, the production and combustion of standard biodiesel produces substantially fewer greenhouse gas emissions and local air pollutants than corn-based ethanol. New Generation Biofuels has created a biofuel even more energy-efficient than biodiesel. Standard biodiesel is produced using a process called transesterification, which is more energy intensive than NGB's bioemulsion process. Our manufacturing process and resulting products produce several benefits over biodiesel, NGB's product: 1) yields lower net CO_2 emissions per unit of energy than biodiesel; 2) does not require blending with traditional diesel derived from petroleum; 3) and emits significantly less NOx in the combustion process.

Connie Lausten
V.P. Regulatory and Legislative Affairs
4308 Brandywine St. NW
Washington, DC 20016

II. DEFINITION OF ELIGIBLE LIQUID BIOFUELS

New Generation Biofuels supports the broad definition of liquid biofuels. The biofuels sector is experiencing a period of rapid technological development allowing feedstock and technology neutrality in the definition we believe supports progress in the biofuels sector.

We support that the revised regulations allow fuel switching and co-firing which will help develop the biofuel market, reduce emissions and displace fossil based fuel in electricity generation. Given that a substantial portion of critical peaking generation capacity in Massachusetts lies in petroleum-fired combustion turbines, and is likely to remain so for some time,[1] liquid biofuels can be used as a substitute in many critical peaker facilities and, in so doing, displace dirty fuels at peak hours when pollution concerns are most acute. Moreover, unlike other major sources of renewable energy, biofuels can be stored and dispatched at times of peak demand, helping to contain rate pressure and providing grid stability and reliability. As the percentage of electricity that must be generated from renewable resources increases, the capability of biomass energy to play a load-following role will grow in its importance to ratepayers. In creating regulations consistent with the Green Communities Act, DOER promotes the development of biofuels in Massachusetts and further encourages cost effective renewable electricity for the Commonwealth of Massachusetts. Specifically NGB views sections 14.05(3) and 15.05(3) the Co-Firing and Blended Fuel Waiver as a means of encouraging such activities.

[1] The Energy Information Administration reports that in 2006 petroleum-based resources accounted for 23.1% of generation capability in Massachusetts, *see* http://www.eia.doe.gov/cneaf/electricity/st_profiles/sept04ma.xls, and 5.2% of total generation, *see* http://www.eia.doe.gov/cneaf/electricity/st_profiles/sept05ma.xls. In 2007, Massachusetts ranked higher than all but three states in total electric generation derived from petroleum liquids. *See* http://www.eia.doe.gov/cneaf/electricity/epm/table1_8_b.html.

Connie Lausten
V.P. Regulatory and Legislative Affairs
4308 Brandywine St. NW
Washington, DC 20016

III. LIFE CYCLE GREENHOUSE GAS EMISSIONS

Any lifecycle standard that is set should apply to all energy applications, renewable or conventional. NGB looks forward to working with DOER in the on-going efforts to determine how and what models to use to calculate the life cycle analysis.

We recognize the trend across the country to include indirect effects of land use that may in part be caused by biofuel production. Indirect land use effects and the increased carbon emissions caused from the production of feedstocks for biofuels are legitimate concerns. The final analysis and model should be based on facts and not assumptions and the indirect effects caused by other renewable energy technologies and fossil technologies should also be included in an analysis so that there is a level and fair comparison in the calculations. Given the uncertainty in the modeling analyses we would encourage a more flexible approach to determining the exact amount of greenhouse gas emissions reductions should be required by the biofuel as opposed to a hard and fast rule of a 50% reduction requirement.

IV. LOW EMISSION BIOMASS POWER CONVERSION TECHNOLOGIES

Given the very short time period between when the statute for the renewable portfolio standard was passed and the regulations were to be completed, DOER prudently determined to set Guidelines in the future for low-emission eligibility criteria after completing the RPS regulations. We look forward to working with DOER and the Massachusetts Department of Environmental Protection as the emissions standards are established. One suggestion may be to follow the New Source Performance Standards promulgated by the U.S. Environmental Protection Agency under section 111 of the Clean Air Act. These standards, which are generally familiar to the industry, would protect the public while providing needed predictability on this issue.

Connie Lausten
V.P. Regulatory and Legislative Affairs
4308 Brandywine St. NW
Washington, DC 20016

V. CONCLUSION

New Generation Biofuels supports the regulation promulgated by the Massachusetts Department of Energy Resources and we recognize that the regulations provide biofuels manufacturers to participate in the Massachusetts RPS by being resource and technology neutral and permitting all feedstocks and technologies that will reduce greenhouse gas emissions compared to petroleum distillate fuel sold in 2005. New Generation Biofuels looks forward to working with DOER and the MA Department of Environmental Protection as the model is established for the Lifecycle Greenhouse Gas Emissions, we anticipate that the model and analysis will be consistent in the inclusion of indirect effects for all technologies. We also look forward to working with the Departments on the guidelines for low emission standards and suggest that one option is to allow generators that satisfy the federal NSPS combustion turbine standards to qualify as "low emission" at least on an interim basis.

Thank you for the opportunity to comment on these important issues.

Respectfully submitted,

_____

Connie Lausten
V.P. Regulatory and Legislative Affairs
New Generation Biofuels